

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

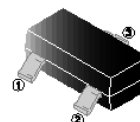
## DESCRIPTION

The 2SA1576A-C is designed for use in driver stage of AF amplifier and general purpose amplification.

**SOT-323**

## FEATURES

- Complements of the 2SC4081F-C
- Excellent  $h_{FE}$  Linearity



## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SA1576A-Q-C	2SA1576A-R-C	2SA1576A-S-C
Range	120~270	180~390	270~560
Marking	FQ	FR	FS

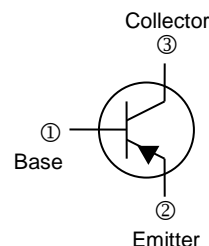
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-323	3K	7 inch

## ORDER INFORMATION

Part Number	Type
2SA1576A-□-C	Lead (Pb)-free and Halogen-free

\*□= $h_{FE}$  Rank



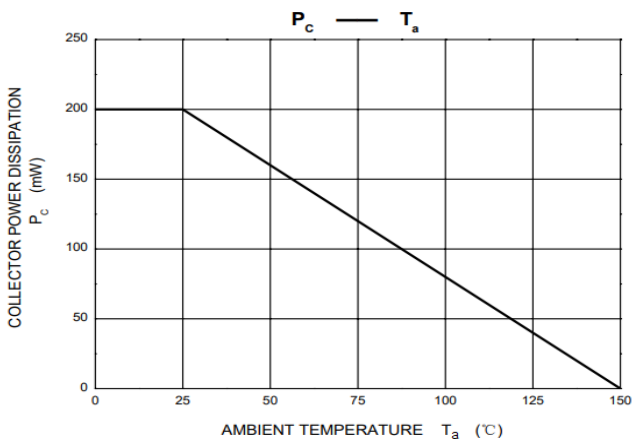
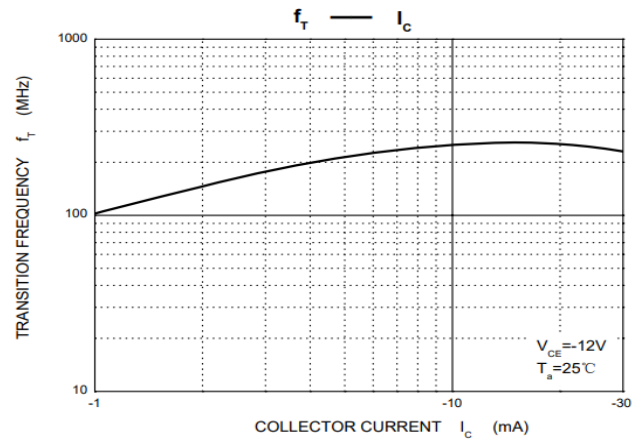
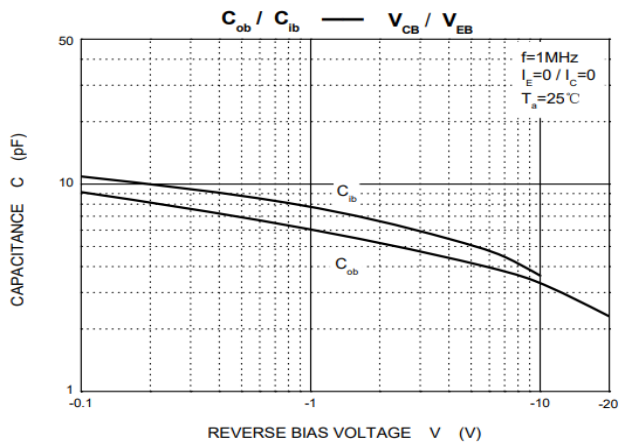
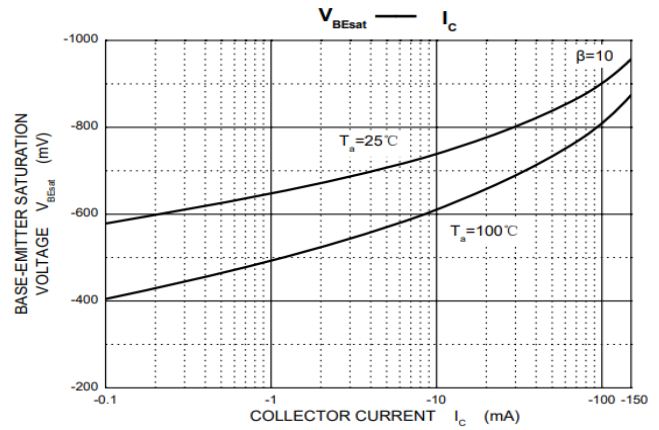
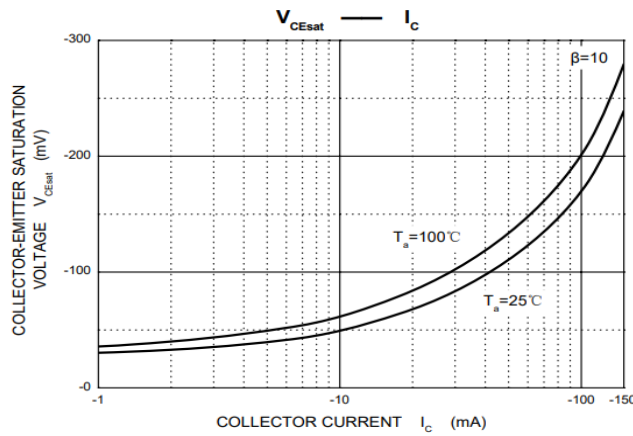
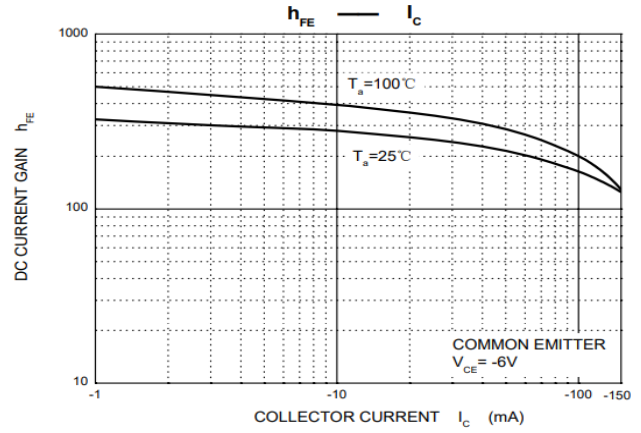
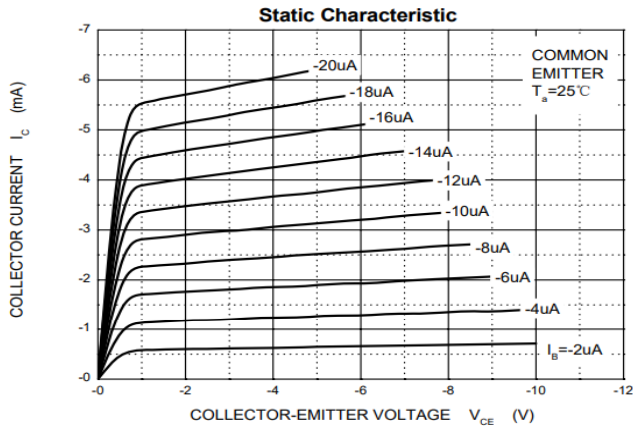
## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	$V_{CBO}$	-60	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-150	mA
Collector Power Dissipation	$P_C$	200	mW
Thermal Resistance from Junction-Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction & Storage Temperature Range	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

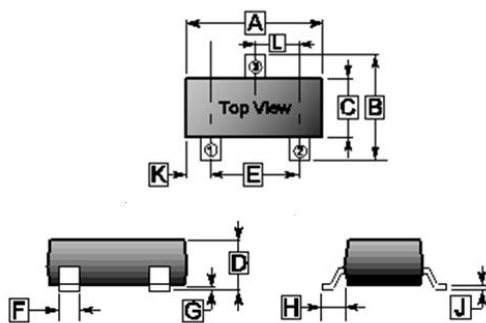
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60	-	-	V	$I_C = -50\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-50	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-	-	V	$I_E = -50\mu\text{A}, I_C = 0$
Collector Cut-off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB} = -60\text{V}, I_E = 0$
Emitter Cut-off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB} = -6\text{V}, I_C = 0$
DC Current Gain	$h_{FE}$	120	-	560		$V_{CE} = -6\text{V}, I_C = -1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Transition Frequency	$f_T$	-	140	-	MHz	$V_{CE} = -12\text{V}, I_C = -2\text{mA}, f = 30\text{MHz}$
Collector Output Capacitance	$C_{ob}$	-	4	5	pF	$V_{CB} = -12\text{V}, I_E = 0, f = 1\text{MHz}$

**CHARACTERISTIC CURVES**



**PACKAGE OUTLINE DIMENSIONS**

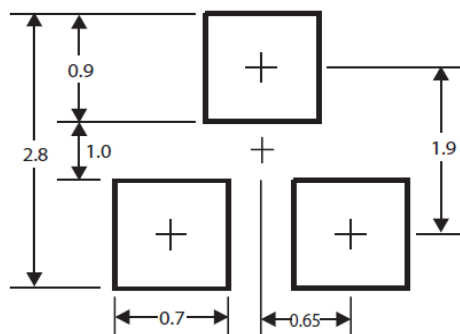
**SOT-323**



REF.	Millimeter	
	Min.	Max.
A	1.80	2.20
B	1.80	2.55
C	1.10	1.40
D	0.80	1.15
E	1.20	2.00
F	0.15	0.50
G	0.10 REF.	
H	0.525 REF.	
J	0.05	0.25
K	0.35 REF.	
L	0.65 TYP.	

**MOUNTING PAD LAYOUT**

**SOT-323**



\*Dimensions in millimeters